

# **Access APM**



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# Chapter

1

# **APM Access**

### **Topics:**

- Access APM via a Web Browser
- About Navigating APM via the Asset Hierarchy
- Navigate APM
- Manage FAVORITES
- Set the Active Tab as Home Page
- Reset your Home Page

#### Access APM via a Web Browser

#### **Procedure**

- 1. Depending on the type of user, go to the following URLs via a Web browser:
  - If your user account is manually created: http://<GEDigitalAPMServerAddress>/
    meridium/index.html?isadmin
  - If you want to sign in to an SSO-enabled environment: https://
    <GEDigitalAPMServerAddress>/meridium/index.html
  - If you want to sign in to a non SSO-enabled environment, if your account is not created manually, and if you want to be authenticated via an active directory: http:// <GEDigitalAPMServerAddress>/meridium/index.html

where, <GEDigitalAPMServerAddress> is the address of the APM Application Server to which you want to connect.

#### Examples:

- http://myserver.mycompany.com/meridium/index.html
- http://myserver/meridium/index.html
- http://172.16.254.1/meridium/index.html

**Note:** If your system uses Data Guardian from Koingo Software and you use the Google Chrome browser, you may have to use the browser in Incognito mode to successfully access APM.

The login page appears.

- 2. In the **Username** box, enter your APM User ID.
- 3. In the **Password** box, enter your password. Passwords are case sensitive.
- 4. In the list that appears, select the data source to which you want to log in.
- 5. Select Sign-in.

You are connected to the APM database, and the APM default dashboard page appears.

**Note:** When logging in to APM, a notification may appear, asking if you want to allow your machine to be used for additional local storage. This local storage is used to store log in information and preferences. Allowing this local storage is optional.

### **About Navigating APM via the Asset Hierarchy**

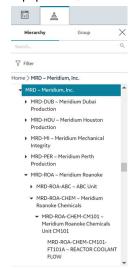
APM is built on the premise, within your company, there are multiple functional locations that can be organized in a hierarchy to represent the fact that some locations belong to other locations. These relationships create the Asset Hierarchy.

#### **Navigating the Asset Hierarchy**

The Asset Hierarchy allows you to browse your assets from the top-level functional location.

- Company (MRD ~ Meridium, Inc.)
- Sites (MRD-ROA ~ Meridium Roanoke)
- Areas (MRD-ROA-REFN ~ Meridium Roanoke Chemicals)
- Units (MRD-ROA-CHEM-CM101 ~ Meridium Roanoke Chemicals Unit CM101)
- Functional Locations (MRD-ROA-CHEM-CM101-FT101A ~ REACTOR COOLANT FLOW)

• Equipment (G0022-065 ~ 0000000001034757 ~ PUMP)



#### Tip:

- To navigate to a parent-level or child-level equipment or functional location of an asset that is selected in the hierarchy, select the corresponding breadcrumb link in the breadcrumb path.
- To expand or collapse the Asset Hierarchy panel, select  $\overset{\bullet}{\to}$  or  $\overset{\bullet}{\times}$ , respectively.
- To resize the Asset Hierarchy panel, drag the border of the panel to the required width.

#### Note:

- As a standard practice, we assume that your equipment is installed in locations that exist on the lowest level of your location hierarchy.
- · The Asset Hierarchy displays:
  - A maximum of 500 top-level records in the hierarchy.
  - A maximum of 500 child equipment or functional locations for a parent functional location.

#### The <Asset Name> Page

As you navigate through the Asset Hierarchy, at each level, information about the Risk, Strategy, and Performance of that level is displayed on the <Asset Name> page. The <Asset Name> page provides a snapshot of all the data in APM related to the asset selected in the Asset Hierarchy. For each Risk, Strategy, and Performance item, there is a hyperlink displaying the number and type of analysis performed against that asset. The hyperlinks, once selected, open the analyses or inspections on a new page while maintaining the selection in the Asset Hierarchy.

Example: View An Asset Criticality Analysis from an Asset in the Asset Hierarchy.

- In the Asset Hierarchy, navigate to Meridium Roanoke Refining.
   Meridium Roanoke Refining is selected in the Asset Hierarchy, and the Meridium Roanoke Refining page is displayed, and the Risk tab is selected. From this page, you can view the Risk snapshot (e.g. there are 11 ACAs, 8 FMEAs, 12 RCMs, etc.) against the asset, as shown in the following image.
- Select the 10 Analyses link.
   On a new page, the ACA Overview page appears, and the selection in the Asset Hierarchy, Meridium Roanoke Refining, is displayed in the page heading.

# **Navigate APM**

The **Applications** menu serves as an access point for each APM module and tool.

To access the **Applications** menu, select = at the top left of the page. The list of modules to which you have access is displayed and organized in the module folders in an alphabetical order. Module folders contain groups of related modules, for example, Health, Strategy, or Tools. You can add links to the frequently used modules to the FAVORITES section in the Applications Menu.

**Table 1: Application Menu Settings** 

Option	Description
=	Opens the <b>Applications</b> menu.
×	Closes the <b>Applications</b> menu.  The menu closes automatically when you select a module or select outside the menu.  The current state of the menu is retained through your current login session. For example, if you enter a search term, then select a module from the search results, the search results are displayed the next time you use the menu in the same session.
Q	Enter a term in the text box to search for a module folder name or a module. The list of matching modules are displayed. Select in the text box to clear the search term.  Note: Search does not affect the modules added to the FAVORITES section.
Jâ	Displays modules alphabetically. When this option is selected and you enter a search term, the search results are displayed alphabetically.  Note: This option appears only when the modules are displayed in folders.
	Displays modules in folders. When this option is selected and you enter a search term, the search results are displayed within folders.  Note: This option appears only when the modules are displayed alphabetically.
~	Collapses the module folder or alphabetic section. <b>Note:</b> When a section is collapsed, if you search for a module, and a matching module appears in that section then, the section will open automatically.
>	Expands the module folder or alphabetic section.
Expand All	Expands all module folders or alphabetic sections.
Collapse All	Collapses all module folders or alphabetic sections
0	Provides access to managing the modules displayed in the FAVORITES Section.

The top navigation bar provides access to the following commonly used APM features:

**Table 2: Top Navigation Bar** 

Option	Description
ெ	Provides access to the main dashboard.  Note: You can configure any General Dashboard or Metrics and Scorecards data to appear on the main dashboard page.
A	Provides access to the asset hierarchy and asset grouping functionality.
E4	Displays a menu from which you can select a family to create a new record.
Q	Displays the search menu, from which you can search APM for records and other items (e.g., Catalog items).
<b>②</b>	Provides access to the APM Help system.
<b>\$</b>	Displays a menu on which you can select <b>Compact View</b> check boxes.  The <b>Compact View</b> selection persists between user sessions, and can be modified at any time. When selected, this option renders compact layout for the following features of APM:  Result Grid  Datasheet  Left or Collapsible pane  Custom forms and tables
8	Displays a menu containing U Sign Out.

## **Manage FAVORITES**

#### **About This Task**

You can add links to the frequently used modules to the FAVORITES section in the Applications Menu. This selection of modules is specific to each user and persists between sessions.

#### **Procedure**

- Add FAVORITES:
  - 1. In the Applications Menu, navigate to the FAVORITES section.
  - 2. Select the **Edit** icon ( ).

    The icon appears against each of the module.
  - 3. Select the icon against each module that you want to add to the **FAVORITES** section.
  - 4. Select **Done** to exit the edit mode.

    The module is added to the **FAVORITES** section in an alphabetical order.
- Remove FAVORITES:
  - 1. In the **Applications Menu**, navigate to the **FAVORITES** section.
  - 2. Select the **Edit** icon ( ).

- 3. Select the icon against each module that you want to remove from the **FAVORITES** section.
- Select **Done** to exit the edit mode.
   The module is removed from the **FAVORITES** section.

# Set the Active Tab as Home Page

#### **About This Task**

The home page is the first display that appears when APM opens or when you select  $\widehat{\omega}$  from the top navigation bar. You can select any general dashboard, any scorecard, or certain other APM pages as your home page.

#### **Procedure**

- 1. Access the APM page that you want to set as your Home Page.
- 2. Select , and then select **Set active tab as Home Page**. The **Set as Home Page** window appears.
- Select **Yes**.
   The active tab is set as your home page.

### **Reset your Home Page**

#### **About This Task**

You can reset your Home Page preference to display the default home dashboard.

#### **Procedure**

- 1. Select , and then select **Reset Home Page to default**. The **Set as Home Page** window appears.
- 2. Select **Yes**.

The default home dashboard is set as your home page.

# Chapter

2

# **Mobile Application**

### **Topics:**

- About the GE Digital APM Mobile Application
- Mobile Application Supported Operating Systems
- Install the GE Digital APM Mobile Application on an iOS Device
- Install the APM Mobile Application on an Android Device
- Install the APM Mobile Application on a Windows Device
- Access APM via the Mobile Application
- Access the APM Mobile Application Using Single Sign-On (SSO)
- Configure Single Logout

## **About the GE Digital APM Mobile Application**

APM provides a mobile app that can be installed on iOS, Android, and Windows devices.

This app offers certain APM functionality designed specifically for use offline and includes the following modules:

- · Mobile Proof Testing
- · Rounds Data Collection
- SIS Management

**Note:** Currently, Legacy GE Digital APM Mobile app for Windows application does not support GeoLocation feature during data collection. This feature will be re-enabled in the future releases.

## **Mobile Application Supported Operating Systems**

#### **Supported Operating Systems**

#### Important:

- Any management policy applied to mobile devices must be set up to allow the required permissions
  for the APM mobile application. If restrictions are placed on iOS, Windows, or Android devices by a
  global policy or mobile device management system, device storage, scanning, photography, location
  services, and other functionality may be disabled.
- If you are using a Windows device, ensure that Windows App Store access is enabled.
- Ensure that the application is distributed to all relevant devices.

The following table lists the operating systems and corresponding versions that the APM mobile application supports.

Operating System	Version(s) Supported
iOS	12, 13, and 14
Android	10, 11, and 12
Windows	Windows 10 (64 bit)

**Note:** The method used to access Reference Documents in the APM mobile application will vary depending on your device platform. For example, on Windows and Android devices, the first time you access Reference Documents, you will be prompted to select the application in which you want to open a file, and this selection will then become the default. Apple iOS will always prompt you to select an application.

# Install the GE Digital APM Mobile Application on an iOS Device

GE Vernova no longer provides unsigned .ipa files for you to sign and distribute in your organization. As per the Apple Developer Program License Agreement and Apple Developer Enterprise Program License Agreement, you cannot bypass the App Store to distribute apps to non-employees. Starting from APM version 4.4, the GE Digital APM Mobile iOS app is distributed through Apple Business Manager only. You must submit a support request toGE Vernova to distribute the GE Digital APM mobile app through Apple Business Manager.

#### **Before You Begin**

An Apple developer's license must be purchased.

**Note:** This procedure is generally done by your organization's IT team.

#### **Procedure**

- 1. Go to GE Vernova Customer Center at https://digitalsupport.ge.com/s/.
- 2. Submit a support request with the following details:
  - Your Apple Organization ID
  - Your Apple Organization Name
  - · OnPremises GE Digital APM App Version

#### **Results**

After you submit a request, GE Vernova will validate and distribute the required app version to your organization. Your organization can then view the app in your Apple Business Manager. Apple Business Manager provides multiple options to distribute the app within your organization.

### Install the APM Mobile Application on an Android Device

GE Vernova provides an Android application, but there are specific steps that you must perform to install the APM mobile application on Android devices.

#### **Procedure**

1. Access the application package file at C:\Program Files\Meridium\ApplicationServer \distribution\GEDigitalAPM.apk.

**Note:** This is the default location of the application package file. The exact location at which you can obtain the application package file may differ based on your initial installation of APM.

2. **Optional:** If your organization does not use mobile device management, in the web page from which you want to distribute the application within your organization, add an anchor tag with an href pointing to the installation file, as shown in the following example:

```
<a href="my.company.com/GEDigitalAPM.apk">Install APMph></a>
```

You can use the link you configured to distribute the application within your organization.

### Install the APM Mobile Application on a Windows Device

#### **Procedure**

1. Access the application package file at C:\Program Files\Meridium\ApplicationServer \distribution\GEDigitalAPM.zip.

**Note:** This is the default location of the application package file. The exact location at which you can obtain the application package file may differ based on your initial installation of APM.

2. Access the application package file at C:\Program Files\Meridium\ApplicationServer \distribution\GEDigitalAPM.zip.

**Note:** This is the default location of the application package file. The exact location at which you can obtain the application package file may differ based on your initial installation of APM.

- 3. On the device on which you want to install the APM mobile application, extract the content of the application package file to a local folder.
- 4. In the folder into which you extracted the application package file content, right-click **Install.bat**, and then select **Run as an Administrator**.

**Note:** If you are using a touch-screen device, press and hold **Install.bat**, and then select **Run as an Administrator**.

The APM mobile application is installed on the Windows device for all current and future Windows user accounts.

5. **Optional:** To cancel future installations or uninstall the APM mobile application, in the folder into which you extracted the application package file content, right-click **Uninstall.bat**, and then select **Run as an Administrator**.

**Note:** If you are using a touch-screen device, press and hold **Uninstall.bat**, and then select **Run as an Administrator**.

The APM mobile application is uninstalled for the Windows user account that is currently logged in, and installations for future Windows user accounts are canceled.

## **Access APM via the Mobile Application**

#### **Procedure**

- 1. On a mobile device, select the APM icon to launch the application.
  - The login page appears.
- 2. In the **Server** box, enter the name or URL of the APM Server to which you want to connect.

#### Important:

If your APM Server is configured to use a secure connection, you must enter the full server URL or IP Address in one of the following formats:

- https://<GEDigitalAPMServer.CustomerDomain>
   -or-
- https://<IP address>

#### Examples:

- https://myserver.mycompany.com
- https://172.16.254.1

A list of data sources configured for the server appears.

- 3. Select the data source to which you want to log in.
- 4. In the **Username** box, enter your APM User ID.
- 5. In the **Password** box, enter your password. Passwords are case sensitive.
- 6. Select Login.

You are connected to the APM database, and the APM default dashboard page appears.

**Note:** When logging in to APM, a notification may appear, asking if you want to allow your machine to be used for additional local storage. This local storage is used to store log in information and preferences. Allowing this local storage is optional.

**Note:** If your server is configured to use HTTPS, you must use a security certificate from a registered Certification Authority to secure your server, self-signed certificates are not allowed. You can find the list of certificates supported by the respective platform from the device itself by following the

procedure mentioned below. If you are using both the platforms, it is recommended that you use a Certification Authority that is supported on both the platforms.

- Andriod: To obtain a list of registered Certification Authorities, check the View Security
   Certificates section under Settings on your Android device. For example, on a Samsung Galaxy
   device, you can see the list by navigating to Settings > Biometrics and Security > Other Security
   Settings > View Security Certificates.
- iOS: To obtain a list of registered Certification Authorities, check the **Certificate Trust Settings** section under **Settings** on your iOS device.

# **Access the APM Mobile Application Using Single Sign-On (SSO)**

This topic describes how to access the APM mobile application using SSO.

#### **Before You Begin**

• Ensure that SSO is configured for APM.

#### **Procedure**

- 1. Start the APM application. The APM login page appears.
- 2. In the **Server** box, enter the name or URL of the APM server to which you want to connect.

**Important:** If your APM server is configured to use a secure connection, you must enter the URL or IP address of the server in one of the following formats:

- <GEDigitalAPMServer.CustomerDomain>(for example, myserver.mycompany.com)
- <IP address> (for example, 172.16.254.1)

A list of data sources configured for the server appears.

- 3. In the drop-down list box, select the data source that you want to access.
- 4. Select **Sign-in with SSO**.

The SSO login page appears that is based on the IDP that is selected while configuring SSO.

5. Specify your SSO credentials, and then log in to access APM. You are connected to APM, and the default dashboard page appears.

**Note:** If you have configured Single Logout, when you log out, you are logged out of the third-party identity provider (IDP) application as well. Therefore, when you attempt to access the APM mobile application the next time, you are first redirected to the IDP login page where you must enter your SSO credentials again to log in.

### **Configure Single Logout**

#### **About This Task**

This topic describes how to configure the settings of the APM mobile application and Active Directory so that after you log out, you are logged out of the third-party identity provider (IDP) application as well. As a result, when you attempt to access the APM mobile application the next time, you are first redirected to the IDP login page where you must enter your SSO credentials again to log in.

#### **Procedure**

- 1. Access the SAML configuration provided in Active Directory, and copy the value provided for the Logout URL parameter. This is the IDP URL to which the APM mobile application sends a SAML logout request when you log out of the APM mobile application.
- 2. On the machine on which you have installed the APM application server, access the saml.json file. By default, it is located in the C:\Program Files\Meridium\ApplicationServer\api folder
- 3. Insert the following parameter, and assign the Logout URL value that you have copied:

```
SingleLogoutServiceUrl="<Logout URL of the identity provider (IDP) application>"
```

```
{
    "SAML": {
        "$schema": "https://www.componentspace.com/schemas/saml-
config-schema-v1.0.json",
        "Configurations": [
                "LocalServiceProviderConfiguration": {
                    "Name": "urn:componentspace:Meridium",
                    "AssertionConsumerServiceUrl": "~/core/security/
ssologinauth",
                    "LocalCertificates": [
                        {
                             "FileName": "sp.pfx",
                             "Password": "password"
                        }
                    ]
                "PartnerIdentityProviderConfigurations": [
                         "Name": "http://fs.xyz.com/adfs/services/
trust",
                        "Description": "ADFS",
                        "SignAuthnRequest": true,
                        "WantSamlResponseSigned": false,
                        "UseEmbeddedCertificate": false,
                        "WantAssertionEncrypted": false,
                        "WantAssertionSigned": true,
                        "SingleSignOnServiceUrl": "https://
fs.xyz.com/adfs/ls/idpinitiatedsignon.aspx",
                        "SingleLogoutServiceUrl": "",
                         "PartnerCertificates": [
                                 "FileName": "idp.cer"
                        1
                    }
                ]
           }
       ]
```

4. Access Active Directory, and then under **Basic SAML Configuration**, in the **Logout URL** box, enter a value in the following format:

 $\verb|https://<APM Application Server Name>/Meridium/api/v1/core/security/singlelogout|$ 

The Logout URL is the APM application URL to which the IDP service sends the SAML logout response after you log out.

After you log out of APM mobile application, when you attempt to log in again, you are prompted to enter your SSO credentials.

# Chapter

3

# **APM Product Workflows**

#### **Topics:**

- Interpreting the Workflow Diagrams
- APM Product Workflow
- Module-Level Workflows
- APM Foundation Personas
- APM Health Personas
- APM Integrity Personas
- APM Reliability Personas
- APM Safety Personas
- APM Strategy Personas

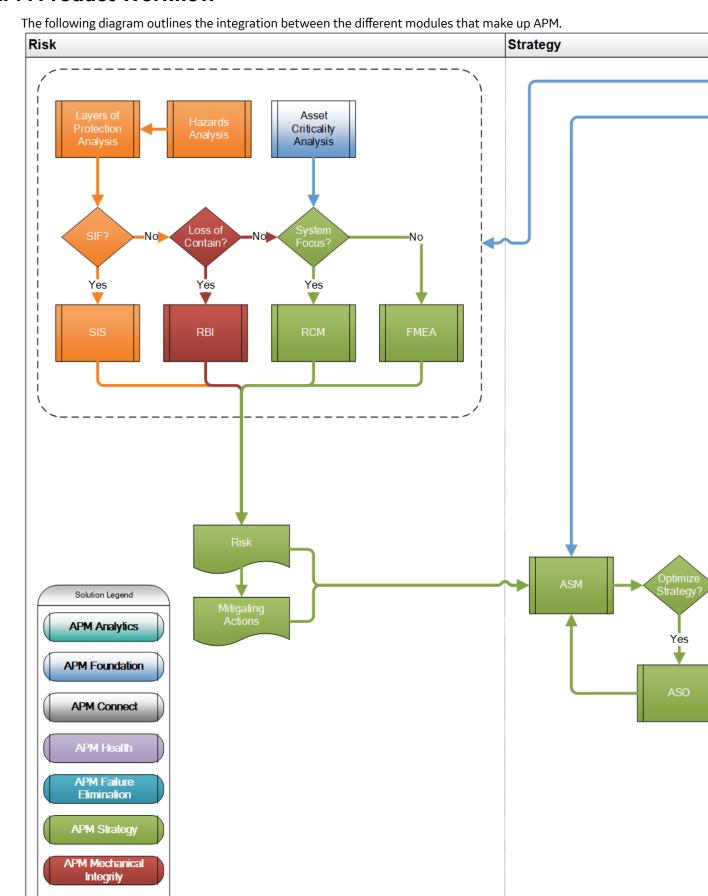
# **Interpreting the Workflow Diagrams**

The Product Workflow section of the APM documentation is designed to illustrate the basic functions of APM.

The following table summarizes the conventions used to represent the various activities in each workflow process.

Shape	Description
	The starting or ending point of a workflow.
	Another workflow within APM.
	Another workflow outside of APM.
	A user action or an automated process.
	A data output, such as a document or record.
	A decision.
	The primary process flow.
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\	An item referenced by part of the process flow.
(A3)	A reference number that accompanies some shapes in the workflow diagrams. These numbers are for identification purposes only and do not indicate the order of the workflows.

### **APM Product Workflow**



### **Module-Level Workflows**

Each solution within APM consists of multiple modules, each of which is composed of one or more workflows that describe the various capabilities of the module. You can find details about each of these product workflows in the respective module user help.

**Tip:** Refer to the APM Product Workflow for a visualization of how these modules interact within APM.

#### **APM Reliability**

Module	Workflows
Generation Availability Analysis	<ul> <li>GAA Administration</li> <li>GAA Event Management</li> <li>GAA Performance</li> <li>GAA Reporting</li> </ul>
Generation Availability Analysis Wind	GAA Wind
Production Loss Analysis	Production Loss Analysis
Reliability Analytics	<ul> <li>Automation Rules</li> <li>Probability Distribution</li> <li>Production Analysis</li> <li>Reliability Distribution</li> <li>Reliability Growth Analysis</li> <li>Spares Analysis</li> <li>System Reliability</li> </ul>
Root Cause Analysis	Root Cause Analysis

#### **APM Foundation**

Module	Workflows
Asset Criticality Analysis	Perform Asset Criticality Analysis
Core Analysis	<ul> <li>Asset Event Analysis</li> <li>Graph Analysis</li> <li>Query Analysis</li> <li>Report Analysis</li> <li>Geospatial Analysis</li> </ul>
Metrics and Scorecards	<ul> <li>Manage SSAS Cubes</li> <li>Manage Metric Views</li> <li>Manage KPIs</li> <li>Manage Scorecards</li> </ul>
Policy Designer	Design Policy     Execute Policy

Module	Workflows	
APM Connect		
Data Loaders	General Data Import	
EAM Extraction and Notification	<ul><li>Asset Management</li><li>Event Management</li><li>Notification Creation</li></ul>	
EAM Work Management	<ul><li>Task and Confirmation Generation</li><li>Work Order Generation</li></ul>	
OT Connect	OT Connect	

### **APM Integrity**

Module	Workflows
Compliance Management	<ul> <li>Compliance Management</li> <li>Compliance Strategy Template</li> <li>European Inspection Management</li> <li>Recommendation Implementation</li> </ul>
Inspection Management	Inspection Planning     Inspection Assessment
Risk Based Inspection	<ul> <li>Define Components</li> <li>Perform an RBI Analysis</li> <li>Recommendation Management</li> <li>Recommendation Implementation</li> </ul>
Thickness Monitoring	<ul> <li>Thickness Monitoring Planning</li> <li>Thickness Assessment</li> <li>Thickness Monitoring Piping Rotation</li> </ul>

#### **APM Health**

Module	Workflows
Asset Health Manager	<ul> <li>Assess Asset Health</li> <li>Manage Health Indicators</li> <li>Manage Health Indicator Sources</li> </ul>
Calibration Management	<ul> <li>Calibration Administration</li> <li>Calibration Assessment</li> <li>Calibration Assessment CMX</li> <li>Calibration Planning</li> </ul>
eLog	eLog

Module	Workflows
Rounds	<ul><li>Manage Rounds Routes</li><li>Manage Rounds Templates</li><li>Monitor Rounds Compliance</li></ul>
Rounds Data Collection	Collect Rounds Data
Rounds Pro	<ul><li>Rounds Designer</li><li>Rounds Data Collection</li></ul>

#### **APM Safety**

Module	Workflows
Hazards Analysis	HAZOP Analysis     What If Analysis
Layers of Protection Analysis (LOPA)	LOPA
Management of Change (MoC)	<ul><li>MoC Administration</li><li>MoC Change Project</li></ul>
SIS Management	<ul> <li>Custom Device</li> <li>SIL Assessment</li> <li>SIL Verification</li> <li>SIL Validation</li> <li>SIL Trip Reporting</li> <li>SRS</li> </ul>

#### **APM Strategy**

Module	Workflows
Action Management	Manage Recommended Actions     Execute Recommended Action
Asset Strategy Management	Asset Strategy Management
Asset Strategy Implementation	ASI for SAP
Asset Strategy Optimization	Asset Strategy Optimization
Failure Modes and Effects Analysis	RCM and FMEA
Life Cycle Cost Analysis	Life Cycle Cost Analysis
Reliability Centered Maintenance	RCM and FMEA

# **APM Foundation Personas**

#### **APM Foundation**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Foundation User MI Health Power	Any APM Security User can perform core analysis on entities for which permission to access has been granted.  In Metrics and Scorecards, the Analyst designs and manages Metric Views, KPIs and Scorecards and has privileges to schedule KPIs or publish the results to the other users.
АРМ	The APM persona represents automated processes performed by the APM system.	MI Foundation User	None
Solution Administrator	The Solution Administrator is responsible for managing advanced features of a APM solution. Some examples are managing health indicators, managing M2M interfaces, and managing SSAS cubes.	MI Foundation Admin MI Health Power	In Metrics and Scorecards, the Solution Administrator sets the connection to SQL Server Analysis Services (SSAS), registers cubes to APM, and manages cube access privileges.
Supervisor	The Supervisor has line authority over subordinates. The responsibilities of the Supervisor include asset integrity and program compliance as determined by company standards, the approval of recommendation proposals, and the review and approval of asset strategies.	MI Foundation Admin	None
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.  The Technician does the following:  Performs inspections, calibrations, or proof tests.  Records results.  Initiates recommendations.	MI Foundation Admin	None

#### **Data Loader**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Data Loader User MI Foundation Power MI Strategy Power	The Data Loader Analyst is responsible for the data that is imported via the data loaders from the external source. Analysts have the authorization and responsibility to assure that the data is collected, cleansed, and loaded completely and correctly. Traits of the Analyst:  Manipulates data Applies standard processes and methodologies for analysis Is a high-level APM User
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.  The Technician does the following:  Performs inspections, calibrations, or proof tests.  Records results.  Initiates recommendations.	MI Data Loader User MI Foundation Power MI Mechanical Integrity Power MI Strategy User	Depending on the module into which you are loading data, the Data Loader Technician can be responsible for numerous APM modules including: FMEA, RCM, Inspection Management, or Thickness Monitoring.

#### **EAM**

Persona	Description	Applicable APM Roles	Notes
System Administrator	The System Administrator is responsible for installing and implementing APM. The System Administrator maintains backups of the APM system and ensures that the data flowing to and from APM is safe, secure, and performing well.	MI Data Loader Admin MI Foundation Admin	In addition to the applicable roles the System Administrator needs access to the following Security Groups: MI SAP Interface Administrator
Solution Administrator (EAM)	The Solution Administrator (EAM) may or may not have access to APM but is responsible for managing and maintaining master data in their EAM system solution.	N/A	None
АРМ	The APM persona represents automated processes performed by the APM system.	N/A	In the EAM Workflow the APM persona represents an automated process performed by APM Connect based on context files and triggers.

Persona	Description	Applicable APM Roles	Notes
Analyst (EAM)	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	N/A	The EAM Analyst may or may not have access to APM but is responsible for planning and scheduling work in the EAM system.
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Data Loader User MI Foundation User MI Strategy Power	In addition to the applicable roles the Analyst needs access to the following Security Groups: MI SAP Interface User.
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.  The Technician does the following:  Performs inspections, calibrations, or proof tests.  Records results.  Initiates recommendations.	MI Data Loader User MI Foundation User MI Mechanical Integrity Power MI Strategy User	In addition to the applicable roles the Technician needs access to the following Security Groups: MI SAP Interface User and MI Configuration Role.

#### **OT Connect**

Persona	Description	Applicable APM Roles	Notes
Solution Administrator	The Solution Administrator is responsible for managing advanced features of a APM solution. Some examples are managing health indicators, managing M2M interfaces, and managing SSAS cubes.	MI Health Power MI Foundation Power MI Data Loader Admin	In addition to the applicable roles the Solution Administrator needs access to the following Security Groups: MI AMS Suite Administrator and MI Configuration Role.

# **APM Health Personas**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Health User  MI Health Power  MI Health Admin  MI Strategy User  MI Strategy Power  MI Strategy Admin	None
АРМ	The APM persona represents automated processes performed by the APM system.	None	None
Solution Administrator	The Solution Administrator is responsible for managing advanced features of a APM solution. Some examples are managing health indicators, managing M2M interfaces, and managing SSAS cubes.	MI Health Admin	None
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.  The Technician does the following:  Performs inspections, calibrations, or proof tests.  Records results.  Initiates recommendations.	MI Health User	None

# **APM Integrity Personas**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Mechanical Integrity Power MI Mechanical Integrity Admin	None
Supervisor	The Supervisor has line authority over subordinates. The responsibilities of the Supervisor include asset integrity and program compliance as determined by company standards, the approval of recommendation proposals, and the review and approval of asset strategies.	MI Mechanical Integrity Power MI Mechanical Integrity Admin	None
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.  The Technician does the following:  Performs inspections, calibrations, or proof tests.  Records results.  Initiates recommendations.	MI Mechanical Integrity Power MI Mechanical Integrity Admin	None

# **APM Reliability Personas**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI FE Power User MI FE User MI Foundation User	None
Operator	The Operator is responsible for day-to-day operation of one or more GAA Units. The operator enters events that affect power generation in a GAA Unit.	MI Foundation User MI FE User	None

Persona	Description	Applicable APM Roles	Notes
Solution Administrator	The Solution Administrator is responsible for managing advanced features of a APM solution. Some examples are managing health indicators, managing M2M interfaces, and managing SSAS cubes.	MI FE Admin MI Foundation User	None
Supervisor	The Supervisor has line authority over subordinates. The responsibilities of the Supervisor include asset integrity and program compliance as determined by company standards, the approval of recommendation proposals, and the review and approval of asset strategies.	MI Foundation User MI FE User	None

# **APM Safety Personas**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	MI Safety Admin MI Safety Power	Responsible for setting up the standards, creating templates, approving recommendations, assigning tasks, and reviewing the calibration or proof test results Responsible for performing SIL assessment, SIL verification, and SIL validation. Responsible for creating Change Projects, adding Checklists to the projects, managing Exceptions and Tasks, and finalizing the Change Project.
Solution Administrator	The Solution Administrator is responsible for creating the Exceptions, Questions, and Checklists that can be used in the Change Project.	MI Safety Admin	None
Technician	The Technician is responsible for executing and documenting inspection activities to maintain both asset integrity and compliance with the overall inspection program.	MI Safety User	Responsible for performing calibrations or proof tests based on the tasks that are assigned.
	<ul> <li>The Technician does the following:</li> <li>Performs inspections, calibrations, or proof tests.</li> <li>Records results.</li> <li>Initiates recommendations.</li> </ul>		

# **APM Strategy Personas**

Persona	Description	Applicable APM Roles	Notes
Analyst	The Analyst is responsible for prioritizing the areas where efforts should be directed to drive improvements that directly affect productivity and profitability. The Analyst monitors and evaluates historical and condition data. Based on evaluation, the Analyst will make recommendations to take action on current conditions or propose changes to existing strategies.	Strategy User Strategy Power Strategy Admin	None
Supervisor	The Supervisor has line authority over subordinates. The responsibilities of the Supervisor include asset integrity and program compliance as determined by company standards, the approval of recommendation proposals, and the review and approval of asset strategies.	Strategy User Strategy Power	None